in the coldest part of the United States. In summer, the lowest is in the lee of the Sierra Nevadas. It is rather surprising to learn that the July vapor pressures about Yuma-Arizona, in almost the hottest and driest part of the Arizona desert are as high as those about the cool Great Lakes. Nothing could emphasize more strongly the fact that we feel in terms of relative humidity rather than in terms of absolute humidity.

In all the humidity tables and maps of Mr. Day's contribution we see a complex weather element which depends on the two variables, temperature and moisture. Humidity maps are in this respect on a par with snowfall maps; but they are less complex than those of evaporation, in which wind enters as another factor.

CHARLES F. BROOKS

SPECIAL ARTICLES

LIMITS OF THE GENERA VANDELLIA AND URINOPHILUS

MY monograph on the Pygidiidæ was published September, 1918. I was not able to state the limits of the genus *Vandellia* nor to indicate the type of the genus *Urinophilus*. These minute fishes are found in the tropical lowlands of South America. They attach themselves to other animals and drink the blood. Some of them are said to enter the urethra of bathers, and being provided with erectile, retrorse spines on the opercles can not be withdrawn. If not excised they finally enter the bladder and cause death.

It was found during the preparation of the monograph that some of the species contain teeth on the mandibles, others not. It was not known whether the type specimen of the genus *Vandellia* contained mandibulary teeth or not. The specimens are in the Jardin des Plantes, Paris, and were not accessible during the war. Dr. J. Pellegrin has recently examined these specimens and reports that the types of *Vandellia cirrhosa* Cuv. & Val. and of *V. Wieneri* do not have mandibulary teeth and the name *Vandellia* may, therefore, be restricted to those species without mandibulary teeth, *cirrhosa, plazai, wieneri* and *hasemani*. The name *Urinophilus* becomes, thereby, restricted to the only known species with teeth on the tips of the mandibular rami, *Urinophilus sanguineus* (E.). The species *Urinophilus sanguineus* is known from one specimen, 62 mm. collected by Mr. Haseman at San Antonio de Rio Madeiro, Brazil. Its alimentary canal was gorged with blood.

The genera *Vandellia* and *Urinophilus* are members of the Pygidiidæ, a family of the Nematognathi, the cat-fish-like fishes. In most of these the maxillary is reduced to a rudiment forming the base of the chief barbel of the catfish. In *Urinophilus* and *Vandellia* the maxillary bone carries peculiar claw-like teeth. In the monograph mentioned above the tooth-bearing maxillary was labelled "premaxillary" in the explanation of Figs. 35 *A* and *B*, and in Fig. 37.

C. H. EIGENMANN

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

SECTION H—ANTHROPOLOGY AND PSYCHOLOGY. II

Racial differences in mental fatigue: T. R. GARTH. An experiment was given to school children of three races—white, Indian and negro, involving a simple task which all could perform. The problem was to ascertain which race showed least falling away in a task of continuous performance. The young group worked for twenty-eight minutes and the older group for forty-two minutes. The Indians, as a group, excel the whites in endurance but not in total performance.

Supernormal memory: P. F. SWINDLE. Ordinarily, the term *hysteria* is a name applied to certain spectacular forms of behavior which arise quite suddenly and which consist of strong and very permanently associated responses. Such a form of behavior may be called a somnambulism, a fugue, a hysterical fit, or a special personality; and it is manifested only by those persons in whom associations are easily and at the same time quite permanently formed. If, in this sense, a person possesses an exceptionally good memory, a single unusual occurrence will probably suffice to establish in him a series of strong responses which will be manifested later as a somnambulism. It is profitable to speak of "big" somnambulisms and "little" somnambulisms, or spectacular somnambulisms and ordinary somnambulisms. Hysteria is